

CTSC 5390

Advanced Applied Epidemiologic Methods

Faculty: Walter Rocca, M.D., M.P.H & Alanna Chamberlain, Ph.D.

Credits: 2

Quarter: Winter

Prerequisites: CTSC 5300, CTSC 5310 and CTSC 5600

This course is required for the CTS Postdoctoral Master's Degree program.

Overview

The goal of this course is to increase the ability of students to interpret and criticize research articles in the medical literature on prevalence study, incidence study, case-control study, cohort study, and clinical trials.

For each type of study, the instructor will explain the general terminology and give guidelines on how to read the articles in the first session prior to students being assigned articles to review and write standardized summary reports. Students and faculty will engage in discussion regarding articles at follow-up sessions.

Objectives

- Apply and interpret the results of a variety of epidemiologic methods. This ability should assist students in reading and writing scientific articles and in writing research grant applications.
- Describe the problems and pitfalls encountered in applying epidemiologic methods to real questions. The focus is on the etiology and natural history of complex diseases.
- Articulate that epidemiologic evidence is uncertain, and that any epidemiologic finding or observation depends on the methods used.

Evaluation

Students will be evaluated on attendance, discussion participation, and three graded assignments.

Students will be expected to spend approximately four to six hours per week on content from this 2-credit course.

Additional online modules related to this topic are available on the [Continuous Professional Development website](#).

For specific dates and times this course is provided, please see the [quarterly detailed course schedule](#).